

**POSITIVE SOLUTIONS OF SMALL NORM TO  
A QUASILINEAR ELLIPTIC INCLUSION PROBLEM**

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**1. Introduction.** In this paper we consider the inclusion system

$$(S) \quad \begin{cases} u'(r) \in \psi(v(r)), \\ -(av)'(r) \in b(r)f(u(r)), \end{cases} \quad r > 0,$$

with initial values

$$u(0) = u_0, \quad \text{and} \quad v(0) = 0.$$

We will make the following basic assumptions for the functions  $\psi$ ,  $f$  and the coefficient functions  $a$  and  $b$ .

$$(h_{\psi f}) \quad \begin{cases} \psi, f \subset \mathbb{R} \times \mathbb{R} \text{ are maximal monotone graphs such that} \\ 0 \in \psi(0), f(0), \psi, f \text{ are odd, } 0 \in \text{Int } D(\psi), \text{Int } D(f), \psi, f \neq 0, \\ \text{and } 0 \leq v_+ < v^*, \quad 0 \leq u_+ < u^*, \end{cases}$$

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